CORRES CONTROL
OUTGOING LTR NO

93RF4672

EG&G ROCKY FLATS

0000005393

DIST	LTR	ENC
BETTI R L	X	X
BENJAMIN, A		
BERMAN, H S		
BRANCH, D B		
CARNIVAL, G J		
DAVIS J G		
FERRERA D W		
HANNI B J		
HARMAN, L K		
HEALY, T J		
HEDAHL, T.	X	X
HILBIG, J G		
IDEKER, E H.		
KIRBY, W A.		
KUESTER, A W.		
LEE, E M		
MANN H P		
MARX, G E		
McDONALD, M M		
McKENNA, F G.	X	X
MONTROSE, J K.		
MORGAN, R V		
POTTER, G L	X	
PIZZUTO, V M		
RILEY J H		
SANDLIN, N B		
SHEPLER, R L.		
STEWART D L		
SULLIVAN M T		
SWANSON, E R.		
WILKINSON, R B		
WILLIAMS, S. (ORC)		
WILSON J M		
ZANE, J O		
S Weste	X	X
T Tory	X	X
P. Ward	X	X
CORRES CONTROL	X	X
TRAFFIC		

CLASSIFICATION

UCNI List		X
UNCLASSIFIED	X	
CONFIDENTIAL		
SECRET		

AUTHORIZED CLASSIFIER SIGNATURE

R C Watkins

4/14/93

DATE

IN REPLY TO RFP CC NO

ACTION ITEM STATUS
☐ OPEN ☐ CLOSED
☐ PARTIAL

LTR APPROVALS
GHS
ORIG & TYPIST INITIALS

RF-46469 (Rev 9/92)

EG&G ROCKY FLATS, INC
ROCKY FLATS PLANT P O BOX 464, GOLDEN COLORADO 80402 0464

April 15, 1993

RF-4672

A H Pauole
Acting Manager
DOE, RFO

Attn M E Van Der Puy

MAY AFFECT/NO EFFECT EVALUATIONS FOR RFP PLANNED ACTIVITIES - GHS-180-93

The draft Rocky Flats Plant Threatened and Endangered Species Biological Assessment Program Plan, submitted to DOE March 12, 1993, has not been approved Although the USFWS made it clear during the informal consultation meeting on the bald eagles, that a biological assessment for sitewide RFP should not be formally submitted until the Ecological Evaluations of the Operable Units (OUs) and a Sitewide Ecological Risk Assessment have been completed, certain components of this program are important to pursue

Information from each of the components listed below will be important for the completion of the Sitewide Ecological Risk Assessment, the cities' Biological Assessments, and ultimately, the RFP Sitewide Biological Assessment These components include

- May Affect/ No Effect Evaluation
- Prairie Dog Colony Mapping and Census
- Bald Eagle and Raptor Surveillance Program
- Ute Ladies'-tresses, Colorado Butterfly Plant, and Preble's Meadow Jumping Mouse Surveys
- Research of Front Range Eagle and Falcon Nesting Areas

EG&G is proceeding with data collection on the above listed program components, and will transmit interim reports to DOE as information is available Attached is a "may affect/ no effect" evaluation for RFP activities This evaluation is based on the best information currently available concerning the projects listed Remedial actions that will ultimately be designed for all OUs must be reevaluated, at that time, to determine if the planned actions will affect the status of the bald eagles or other threatened and endangered species The ecosystem is dynamic, and the future presence and/or behavior of the bald eagles and other species of concern cannot be predicted Future activities will require evaluation on a case by case basis as they occur This evaluation is intended for use as a reference in implementation of the listed activities

Monitoring of the status of bald eagles in the vicinity of RFP must continue to ensure that changes in habitat use, and future nest sites, are recorded, and that RFP activities are revised as necessary to maintain a "no effect" standing Because of the nest site location, and the likelihood the pair of bald eagles will return, RFP actions must be reevaluated on an annual basis to allow timely response to a change in status of bald eagles in the vicinity of RFP Should other threatened or endangered species be discovered, their presence will also have to be considered in planning of RFP activities

ADMIN RECORD

REVIEWED FOR CLASSIFICATION/UCNI
BY G T Ostdiek
DATE 6-11-93

Should you have any comments or questions, please contact Steve Nesta at X8605, or Dick Flory at X8680

George H Setlock

G H Setlock, Director
Environmental Protection Management

MBM mad

Org and 1 cc - A H Pauole

Attachments
As Stated

cc
B K Thatcher

EVALUATION OF RFP ACTIVITIES FOR IMPACTS ON BALD EAGLES

For the purposes of a preliminary impact evaluation, RFP activities scheduled and planned for the next several years have been listed and evaluated for their potential to impact a bald eagles nest at Standley Lake and bald eagles foraging on RFP Conversely, this list of activities has also been evaluated for impact on the activities due to limitations likely to be imposed by the US Fish and Wildlife Service on these projects Because the bald eagles have departed from the area, and are not expected to return until winter, no adverse effect on the eagles from RFP activities is expected, nor is an adverse effect on projects expected

ONSITE ACTIVITIES

Onsite activities that may affect bald eagles are any routine field activities in the buffer zone that may cause field personnel to approach a bald eagle or that must be performed in an area a bald eagle may enter

- The ditch burn has been postponed indefinitely, however, if it were to proceed, during the restricted window of April 1993, no bald eagles would be disturbed since they have now left the area

- Routine field work may lead workers into an area where a bald eagle is foraging or perching In such a case, workers would leave the area and wait for the eagle to depart before proceeding with their scheduled activities Should a bald eagle enter a work area, workers would stop work and withdraw from the area until the eagle departed In either case there would be no impact on the eagle, and only a temporary impact on the activity

- No other onsite activities are expected to have potential impact on bald eagles using the area, whether for winter habitat or as a nesting area Unless the bald eagles move their nest site into the buffer zone, which is unlikely because better habitat exists elsewhere, activities within the boundaries of RFP will have no effect Should bald eagles attempt to nest on RFP, this position would require reevaluation

OFFSITE ACTIVITIES

The OU3 activities that would have potentially impacted the success of the bald eagle nest, had the eagles remained, may be carried out with no effect if completed before the bald eagles return for the winter The ultra high volume air sampler operation may be subject to some limitations by the USFWS

- The wind tunnel test plots are located below the highwater lines of both reservoirs so tests can be performed on the lake-bottom sediments before the reservoirs are refilled in May These tests will be completed well before the bald eagles return to the area

- Installation of 2-meter meteorological stations near Standley Lake will require one-hour monthly visits after installation These visits will be to allow downloading of data from the tower to a computer If these stations are installed at preexisting sites that are already tolerated by wintering eagles, there should be no effect after installation

- Installation of the ultra high volume air samplers would possibly cause disturbance during

operation because of their very high intake capacity The continuous ambient noise level in the vicinity of the nest would be increased due to the operation of these samplers One planned installation site is approximately 1000 feet from the nest site Should the nest site be used in the future, the USFWS may restrict the use of this sampler

- The location of the 10-meter meteorological tower to be installed south of Great Western Reservoir may be in line of sight of the nest, however, data gathering visits to the tower would be limited to one-hour monthly visits to download data, and are not expected to stress the bald eagles if the nest site is used in the future

- Weed control activities planned for the Jefferson County Open Space Lands east of Indiana will include mowing, up to three times during the 1993 growing season, and selective herbicide application before undesirable species flower and set seed One area to be treated for weed control is a long east-west strip directly east of the RFP east gate entrance road The second area of treatment is just southwest of Mower Reservoir, a little more than a mile from the nest site Because the bald eagles are no longer in the area, mowing is expected to have no effect on the eagles The USFWS has expressed concerns about the use of herbicides in a bald eagle foraging area, and before herbicide application can proceed, these concerns will have to be addressed

- Aquatic sampling for the OU3 environmental evaluation, in the stream channels of Walnut Creek and Woman Creek from Indiana eastward to Church Ditch, is scheduled to be performed during spring runoff Instream flow is necessary for the aquatic sampling, and this will only be available during spring runoff This activity will be completed before the bald eagles return for the winter, and is expected to have no effect

- Construction on any portion of Option B cannot proceed without approval of the USFWS, after submittal of the biological assessment for this project

CUMULATIVE IMPACTS ON THE BALD EAGLES FROM ALL SOURCES

The RFP activities scheduled and planned for the next several years are not expected to impact the bald eagles Should the pair of bald eagles return to the Standley Lake nest site and attempt to use it in the future, placement and operation of the ultra high volume air samplers, particularly the one to be located across the road from the nest site, may have to be revised

Several factors other than Rocky Flats Plant activities will affect the bald eagles should they return to the nest site There is a good deal of human activity associated with Standley Lake These activities include ice fishing, bank fishing, boating, and other forms of recreation carried on in the Jefferson County Open Space There is a golf driving range less than a mile away from the nest site Since announcement of the nest location in the newspaper, large numbers of bird watchers have parked along the adjacent roadways to watch the eagles, and many have exited from vehicles and approached the nest Bird watching activities have ceased since the eagles departed, but may resume in the fall Several residences are within one half mile from the nest site The approach path for airplanes landing at Jefferson County Airport passes directly over the nest site These human influences may create enough disturbance of the eagles to cause abandonment of the nest

There is also the possibility of interspecific agonism, or aggression from other species The bald eagle nest is within the historic established territories of golden eagles that nest along the foothills Golden eagles are known to aggressively defend their territories from intruders Great horned owls will often usurp nests from other species, then vigorously defend their new territory These natural influences could cause nest abandonment

Cumulative impacts from all the above influences are impossible to predict These factors combined will most likely prevent the eagles from successfully utilizing the Standley Lake nest site in the future, and may have contributed to their abandonment of the site this season

Wintering bald eagles in the vicinity are tolerant of routine activities in the area Eagles that are not nesting are not tied to a particular locale, and if the intensity of human activity is intolerable, they will move away The most important negative impacts on wintering eagles in the area come from encroachment by housing and industrial development on open areas, and the subsequent elimination of habitat, with the accompanying loss of prey Because the night roost used by many of the wintering bald eagles in the vicinity of RFP is located on City of Boulder Open Space, RFP activities do not affect this important bald eagle site Communal roost sites are considered to be critical habitat for bald eagles

EVALUATION OF RFP ACTIVITIES FOR IMPACT ON ENDANGERED OR THREATENED SPECIES IN THE PLATTE RIVER IN NEBRASKA

No Rocky Flats Plant activities are expected to impact threatened or endangered species in the South Platte River drainage in Nebraska *During remediation and cleanup activities, water discharge quality and* volume, are expected to remain unchanged from the current conditions When pond cleanups are under way, plans indicate that individual ponds will simply be withdrawn from the system, the water will be pumped to the terminal ponds, and the cleanup will proceed Discharge rates from the terminal ponds are *expected to be unaffected*

Option B, a DOE-funded water diversion project is expected to have no net effect on waters in the South Platte River in Nebraska The diversion of water will be from one sub-drainage of the South Platte River to another Since both drainages are headwaters of the South Platte River no net impact to flows in Nebraska are anticipated

EVALUATION OF RFP ACTIVITIES FOR IMPACTS ON THREATENED OR ENDANGERED SPECIES OTHER THAN BALD EAGLES

Surveys for Ute ladies'-tresses (*Spiranthes diluvialis)*, a threatened plant with potential habitat at RFP, were performed in planned work areas and potential habitat in 1992 Further surveys are planned in 1993 and 1994 to meet guidance established by the USFWS During field work in OU3, filed personnel also searched for Ute ladies'-tresses No individuals of this species have been found on plantsite or in OU3, therefore no effect is expected to occur to this species as a result of RFP activities

Peregrine falcons have been observed occasionally at RFP, but the active nesting area is several miles to the northwest, and observations indicate that their visits were casual There is no appropriate nesting habitat for peregrine falcons at RFP The only impact RFP is expected to have on peregrine falcons is the positive influence of providing unpopulated open spaces in which the birds can hunt unmolested by humans

Other species with special status that may be added to federal lists in the future are Colorado Species of Special Concern, such as the Preble's meadow jumping mouse, which occurs on RFP, and the Colorado butterfly plant which has not been found These species do not currently receive federal protection Neither species is expected to be adversely impacted by RFP activities as they are now planned

LIST OF ACTIVITIES EVALUATED FOR POTENTIAL AFFECT OR NO EFFECT ON BALD EAGLES

DOE Funded Outside Activities

1 Construction of Option B, which includes a storm retention structure in the southeast portion of the buffer zone in the Woman Creek drainage, and a large capacity diversion ditch designed to carry storm water around the north side of Standley Lake

OU2 Activities to Start as Soon as Possible in 1993

1 Drilling activities including bedrock well drilling will start as soon as possible from the plant site to Indiana

2 Soil sampling in the same area will start as soon as possible

3 Some biota sampling may be conducted

OU3 Activities to Start as Soon as Possible in 1993

1 Air sampler and meteorological station installation along 100th Street and the shoreline of Standley Lake and near Great Western (air samplers are very high cfm models and will produce a great deal of noise)

2 Mobile wind tunnel sampler tests (these will be approximately 4 hours in duration) to be located around exposed lake bottom of Standley Lake and Great Western Reservoir

3 Aquatic sampling in the lower reaches of Walnut and Woman Creeks between Indiana and Church Ditch

4 Weed control mowing and spraying activities in the Jefferson County Open Space area east of Indiana

OU4 Planned Activities Through FY95

1 Drilling activities around the ponds in the upper Walnut Creek drainage

2 Ecological sampling through August 1993

3 Phase 2 in 1994-95 will include additional drilling and other sampling

OU5 Activities Starting in Spring of 1993 as Soon as Weather Permits

1 Drilling along the Woman Creek drainage as far east as Section 14

2 Surface water sampling in Woman Creek to be completed by May

OU6 Activities Starting In Spring of 1993 as Soon as Weather Permits

1 Sediment sampling of Walnut Creek on site

2 Flume installation downstream of STP

3 A and B Pond cleanup may begin within 3 years

4 If there is a Phase 2, more well drilling, borings, surface soil scrapes, more pond sediment samples

OU7 Activities are Ongoing in 1993

1 The present landfill (OU7) has a great deal of heavy equipment activity going on year round, but assessment work includes the addition this spring of drilling and cone penetration sampling which is scheduled to be completed by the end of March

2 Surface soil sampling, landfill pond sediment sampling, and environmental evaluation surveys will be conducted through the spring and summer

OU8 Planned Activities Until FY98

1 The work area is within the industrial area, and activities will be limited to surficial soil sampling, soil gas, and radiological surveys

OU9 Planned Activities Until FY98

1 The work area is within the industrial area, and activities will be limited to surficial soil sampling, soil gas, and radiological surveys

OU10 Planned Activities Until FY98

1 The work area is within the industrial area, and activities will be limited to surficial soil sampling, soil gas, and radiological surveys

OU11 Planned Activities for 1993 and Into 1994

1 Soil trenching for sampling in the west spray field

2 Drilling will start in the fall of 1993, and may continue into 1994

OU12 Planned Activities Until FY98

1 The work area is within the industrial area, and activities will be limited to surficial soil sampling, soil gas, and radiological surveys

OU13 Planned Activities Until FY98

1 The work area is within the industrial area, and activities will be limited to surficial soil sampling, soil gas, and radiological surveys

OU14 Activities Starting in Spring of 1993 as Soon as Weather Permits

1 Soil gas, surficial soil sampling, air sampling all are planned inside the industrial area

OU15 Planned Activities Until FY98

1 Initial work will be inside buildings in the industrial area

2 If required Phase 2 activities may include soil gas, surficial soil sampling, air sampling, and drilling

Plant Maintenance Activities in the Buffer Zone

1 Extensive road repair and maintenance throughout the buffer zone to include culvert replacement, graveling and grading on all major buffer zone roads

2 Removal of old interior fencing within the buffer zone

3 Perimeter fence mending

4 Coors does routine pipeline inspection on their north-south pipeline that parallels the power transmission lines

5 Public Service drives transmission lines, across the southern and eastern portions of the buffer zone for routine inspections

6 Routine surface water and groundwater sampling is carried on year-round

7 Plantwide drainage renovation is slated to start in 1997

8 Construction of new sanitary landfill will begin when permitting is complete

9 A new waste storage site near the shooting range for PU&D may be developed this year, or in the near future

Surface Water Division Activities to Start In 1993 as Soon as Weather Permits

1 Weed control test plot burns, and larger scale mowing to start in late May to early June will extend to areas adjacent to the east gate along Indiana

2 Herbicide application in selected areas of Woman Creek will be performed in the early fall

3 Flume installation is to start in May in Woman Creek and Mower Ditch at Indiana, Woman Creek tributaries at the upstream boundary fence, Walnut Creek at Indiana, upstream of Pond C1, and at Ponds A4 and A5

4 Dam faces will be mowed on all dams, probably including D1, during the spring to allow dam inspections

5 B1 dam repair is scheduled this spring

6 Culvert cleanouts on all diversion ditches are scheduled this spring and summer for culverts

7 Water will be pumped intermittently from Pond B2 to Pond A2

8 Spray evaporation will be conducted by pumping water through spray heads onto the landfill and out over Pond A2 from April through October

9 Cleanout of the South Interceptor Ditch by dredging is planned in the next few years, though a specific schedule is not in place

10 Repair or removal of the dam on Pond C2

11 Potential construction of a new facility to augment the sewage treatment plant

12 Burning the cattails in the South Interceptor Ditch scheduled for April 1, 1993 was postponed indefinitely

Other Miscellaneous Activities at RFP

1 Deep seismic drilling around the north perimeter of the PA

2 Geologic exploration pit construction in the south half of Section 15 by Western Aggregate to be done in the spring of 1993

3 Soil sampling in the americium zone by CSU contract to be done in the summer of 1993

4 A drain culvert for the 881 building may be removed and replaced on the 881 Hillside

5 Continuation or routine field surveys and monitoring activities on biota, air quality, water quality, water retention and diversion structures on a year round basis